# CS 255 Business Requirements Document Template

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client’s needs.

**Tip:** You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.

## System Components and Design

### Purpose

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* [Client: DriverPass, owned by Liam
* Objective: The system is designed to provide online driving test preparation, practice exams, and on-the-road training to better prepare customers for driving exams.]

### System Background

*What does DriverPass want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* [Problem: High failure rates among driving test applicants due to inadequate preparation, with students mainly studying previous tests.
* Solution: DriverPass wants an online system to offer driving practice, lesson scheduling, and DMV-compliant content. The system should handle reservations, track customer driving lessons, and maintain access control for different roles.]

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* [System Objectives:
* Provide access to online driving practice exams.
* Allow customers to schedule, cancel, and modify appointments.
* Enable tracking of driving lessons, including the trainer and vehicle used.
* Ensure secure access for different users (admin, IT officer, secretary, customers).
* Ensure compliance with DMV updates on rules and practice questions.]

## Requirements

### Nonfunctional Requirements

*In this section, you will detail the different nonfunctional requirements for the DriverPass system. You will need to think about the different things that the system needs to function properly.*

#### Performance Requirements

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* [Platform: Web-based system accessible from any computer or mobile device.
* Speed: The system should perform tasks like logging in and booking lessons within seconds.
* Updates: Regular updates from the DMV to ensure the system reflects current rules and standards.]

#### Platform Constraints

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* [Operating Systems: Compatible with both Windows and Unix platforms.
* Backend Tools: Requires a secure cloud-based infrastructure with databases to store user data and lesson schedules.]

#### Accuracy and Precision

*How will you distinguish between different users?* *Is the input case-sensitive? When should the system inform the admin of a problem?*

* [User Identification: Distinct user roles for customers, admin, and IT staff.
* Input Validation: Fields like usernames, passwords, and schedules must be validated, including case-sensitivity for passwords.
* Alerts: Admins should receive notifications if there is unauthorized access or system issues.]

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* [User Management: Admins should have the ability to add, modify, or remove users without changing the system code.
* System Updates: Must adapt easily to software and platform updates.
* IT Access: IT admin requires full access to manage accounts and reset passwords.]

#### Security

*What is required for the user to log in? How can you secure the connection or the data exchange between the client and the server? What should happen to the account if there is a “brute force” hacking attempt? What happens if the user forgets their password?*

* [Login: Users should log in using secure credentials.
* Data Security: All communication between the client and server should be encrypted (e.g., SSL/TLS).
* Brute Force Protection: After multiple failed login attempts, lock the account and notify the admin.
* Password Recovery: Users should be able to reset their passwords via email if forgotten.]

### Functional Requirements

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

* [The system shall validate user credentials during login.
* The system shall allow customers to schedule, cancel, or modify driving lessons.
* The system shall track lesson details, including the trainer, vehicle, and time.
* The system shall notify users of updates from the DMV regarding driving rules.
* The system shall generate activity reports for admin users showing user activity.]

### User Interface

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* [Users:
* Liam (Owner): Needs access to reports and the ability to manage system settings.
* IT Officer (Ian): Needs full system control, including managing user accounts and tracking modifications.
* Secretary: Needs a user-friendly interface to schedule lessons and access customer records.
* Customers: Require a straightforward interface to book and modify appointments, view training progress, and reset passwords.
* Interface: The interface should be accessible via web browsers on both desktop and mobile devices.]

### Assumptions

*What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*

* [Technology: Assume users will have access to the internet when accessing the system.
* Training: Users will receive training on how to use the system, including different levels of access based on their roles.]

### Limitations

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* [Resources: Limited development time may restrict some non-essential features, such as future module customization.
* Budget: Cloud infrastructure and security measures may be restricted based on budget constraints.
* Technology: The system might have limited compatibility with older browsers or operating systems.]

### Gantt Chart

*Please include a screenshot of the GANTT chart that you created with Lucidchart. Be sure to check that it meets the plan described by the characters in the interview.*

[A screenshot of a gantt chart

Description automatically generated

*]*